



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,207	10/10/2003	Stephen Gold	200309331-1	2882

22879 7590 09/19/2007  
HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
----------

DILLON, SAMUEL A

ART UNIT	PAPER NUMBER
----------	--------------

2185

MAIL DATE	DELIVERY MODE
-----------	---------------

09/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/684,207

Applicant(s)

GOLD ET AL.

Examiner

Sam Dillon

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The Examiner acknowledges the applicant's submission of the amendment dated June 18, 2007. Per the amendment, Claims 1, 10, 13, 16, 19 and 23 have been amended. The instant application having Application No. 10/684,207 has a total of 23 claims pending in the application; there are 6 independent claims and 17 dependent claims, all of which are ready for examination by the examiner.

#### **I. RESPONSE TO AMENDMENT(S) / ARGUMENT(S)**

2. Applicant's arguments (*page 11 paragraph 2*) with respect to the 35 U.S.C. 102(b) and 103(a) rejections of Claims 1-23 have been fully considered and are **persuasive**, but are moot in view of the new ground(s) of rejection, as described below. However, the Examiner respectfully disagrees with numerous assertions made by the Applicant, and traverses below.

3. Regarding Claim 1, the Applicant contends (*page 10*): **"The Vines reference is a mere tutorial on how to save files on a Windows-based operating system. Vines does not discuss any aspects of a file backup procedure, much less discuss different types of backup devices, backup media, or a media manager."** The Examiner respectfully disagrees, and as stated previously asserts that saving a file *is* a file backup procedure and that the additional features the Applicant lists (*different types of backup devices and backup media, and a media manager*) are not required by Claim 1.

4. Regarding Claim 1, the Applicant contends (*page 10*): **"The first problem with this assertion is that the claims nowhere use the language "a list of a single medium of conveyance."** The Examiner respectfully disagrees and notes that, as stated in the previous rejection, the claims read *"a list of media"*, and that media is defined as a *"medium of conveyance"*, and also that a list can have a single item.

Art Unit: 2185

5. Regarding Claim 1, the Applicant contends (*page 10*): **“While a ‘list of media’ may be regarded as a file, the examiner has failed to point out where Vines discloses (or even suggests) that such a list could be ordered ‘by physical location of the backup devices’ and then ‘presenting’ that list ‘to a user’.”** As noted by the Applicant (*page 11*), the Examiner asserted that in the case of a single medium this ordering would be inherent.

6. Regarding Claim 1, the Applicant contends (*page 11*): **“The first problem with the examiner’s argument is that the ‘list of media’ of claim 1 involves more than a list of ‘length 1’ because the term ‘media’ is plural, not singular.”** The Examiner respectfully disagrees. The Examiner sees no requirement that a list of items require the inclusion of more than one item, and notes that not only is this requirement not implied in the field of computer science, it is not strictly implied even more generally. Take for example a manager giving out the office Christmas presents, and he has a *list of people* that haven’t picked them up yet. One by one he crosses their names off until there is a single name left. Though there is only one name on it, it is still the *list of people* that haven’t yet picked up their office Christmas present.

7. Regarding Claim 1, the Applicant contends (*page 11*): **“Secondly, claim 1 requires the list of media to be loaded into a ‘plurality of backup devices’. While the Windows dialog box presented in Vines gives the user several ‘drives’ where the file can be saved, it is the ‘file as a whole that is saved, and that file is saved in a single drive.’”** The Examiner respectfully disagrees. Loading a file into one of the plurality of backup devices is interpreted as *“loading the file into the plurality of backup devices”* in that it is migrating the file from outside the set of devices to inside the set of devices.

8. Regarding Claim 1, the Applicant contends (*page 12*): **“The fact remains that Vines is nothing more than a simple tutorial on how to save document files in a Windows format.”** The Examiner notes that it is by virtue of the breadth of the claims that such a reference could

Art Unit: 2185

be considered to read upon the claimed invention. It is for this purpose that the Examiner felt the need to fully respond to the Applicant's arguments regarding the Vines reference, even though the new grounds of rejection listed below rendered them moot.

9. Regarding all other Claims not specifically traversed above and whose rejections were upheld, the Applicant contends that the listed claims are allowable by virtue of their dependence on other allowable claims. As this dependence is the sole rationale put forth for the allowability of said dependent claims, the Applicant is directed to the Examiner's remarks above.

Additionally, any other arguments the Applicant made that were not specifically addressed in this Office Action appeared to directly rely on an argument presented elsewhere in the Applicant's response that was traversed, rendered moot or found persuasive above.

## **II. OBJECTIONS TO THE APPLICATION**

10. Claim 10 objected to because of the following informalities:

- a. Claims 1, 10, 13, 16, 19 and 23 read "*a list of media **to be** ...*", "*one medium in the list **to be** ...*", "*a second medium in the list **to be** ...*" and "*a list of media from a user **to be** ...*". These limitations are interpreted as claiming intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See MPEP 2106 II (C).

### III. REJECTIONS BASED ON PRIOR ART

#### **Claim Rejections - 35 USC ' 103 - Fermilab**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 10-12, 16-18 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fermilab et al. ("*Release Note 39.2 The 'juke' Jukebox Control Package User/Programmer Guide*").

13. As per **Claims 1, 13 and 19**, but more specifically to Claim 13, Fermilab discloses a system comprising:

a planner (*program of Appendix A*) to receive a list of media (*JUKELIST, Appendix A*) to be loaded into a plurality of backup devices, at least one medium in the list to be loaded into a first backup device, and at least a second medium in the list to be loaded into a second backup device ("*Loading Tapes into Drives*"); and  
a user interface (*environment in which output of the echo commands is provided, Appendix A*), communicatively coupled to the planner, to present the list to a user.

Fermilab does not appear to explicitly disclose ordering the list provided to the program of Appendix A by physical location of the backup. In a separate section, Fermilab discloses ordering a list by physical location of the backup devices (*slots, "Loading Tapes into Drives"*). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to order the list provided to the program of Appendix A by physical location. The motivation for doing so would have been that as it was desirable in one listing for the user, it could reasonably be considered as desirable in another listing for the same reason. Additionally, it would have

Art Unit: 2185

been obvious to try and would have yielded predictable results. Therefore, it would have been obvious to order the list provided to Fermilab's program of Appendix A by physical location, to obtain the invention of Claims 1, 13 and 19.

14. As per Claims 2, 14 and 20, but more specifically to Claim 13, Fermilab discloses the system of Claim 13, further comprising a configuration agent, communicatively coupled to said planner, to configure a physical location for each of the backup devices (*each slot inherently has a physical location*).

15. As per Claim 3, Fermilab discloses the method of Claim 2, wherein configuring the physical location comprises obtaining information for (*interpreted as intended use*) one or more site locations and assigning each of the backup devices to one of the site locations (*inherent in a computer having a drive is a user or technician installing the drive to a computer or to storage means, the means fulfilling the limitation of the site location*).

16. As per Claim 4, Fermilab discloses the method of Claim 3, wherein configuring the physical location further comprises: obtaining information for (*interpreted as intended use*) one or more data centers, each of the data centers associated with one of the site locations; and assigning each of the backup devices to one of the data centers (*a hard drive in a computer is a backup device assigned to a "data center", i.e. the collection of all hard drives in that computer*).

17. As per Claims 5 and 21, but more specifically to Claim 5, Fermilab discloses the method of Claim 2, wherein configuring the physical location comprises assigning a grid location in a data center to at least one of the backup devices (*a hard drive in a computer is a grid location in a data center*).

18. As per Claims 6 and 22, but more specifically to Claim 6, Fermilab discloses the method of Claim 5, wherein configuring the physical location further comprises assigning an order

Art Unit: 2185

number to each of the grid locations (*any address the grid locations is inherently implied to be numerical in nature as it is realized in a computing system*).

19. As per Claim 7, Fermilab discloses the method of Claim 5, wherein assigning a grid location comprises for at least one of the backup devices, automatically assigning, to the backup device, a grid location of a system attached to the backup device (*an address of the backup device is shared by pieces of the backup device*).

20. As per Claim 8, Fermilab discloses the method of Claim 1, wherein ordering the list comprises ordering the list of media by an order number associated with each of the backup devices (*"Loading Tapes into Drives", page 1*).

21. As per Claims 9 and 15, but more specifically to Claim 15, Fermilab discloses the system of Claim 13, wherein said user interface is further to receive a list of media to be used for one or more future executions of one or more backup jobs associated with the backup device and to transmit the list to said planner (*Appendix A*).

**Claim Rejections - 35 USC ' 103 – Fermilab and Kanai**

22. Claims 10-12, 16-18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fermilab et al. (*"Release Note 39.2 The 'juke' Jukebox Control Package User/Programmer Guide"*) in view of Kanai et al. (*US Patent Publication Number 2002/0152181 A1*).

23. As per Claims 10, 16 and 23, but more specifically to Claim 10, Fermilab discloses the method of Claim 9, but does not disclose that before receiving the list of media, calculating a required number of scratch media needed for the future executions and presenting the required number of scratch media to the user.

Kanai discloses calculating a required number of media needed for the future executions and presenting the required number of scratch media to the user (*paragraphs 18 and 19*).



Art Unit: 2185

Fermilab and Kanai are analogous art in that they have to do with user management of storing files. At the time of the invention it would have been obvious to a person having ordinary skill in the art to save use Fermilab's jukebox for Kanai's rented storage.

The motivation for doing so would have been that rented storage allows users to be released from the burden of maintenance of storage and thereby have less responsibility of administration (*Kanai, paragraph 5*). Therefore, it would have been obvious to combine Fermilab's jukebox with Kanai's rented storage for the benefit of easier administration, to obtain the inventions of Claims 10, 16 and 23.

24. As per Claim 11 and 17, but more specifically to Claim 11, Fermilab and Kanai disclose the method of Claim 10, wherein calculating comprises:

obtaining backup job information from one or more backup applications for the backup jobs (*Kanai, history of usage, paragraph 18*); and

using the backup job information to calculate the required number of scratch media needed for the future executions (*Kanai, paragraph 18*).

25. As per Claims 12 and 18, but more specifically to Claim 12, Fermilab and Kanai disclose the method of Claim 10, wherein calculating the required number of scratch media comprises for at least one of the future executions, dividing an average historical backup size of the backup job by an average capacity of a media type associated with the backup job (*Kanai, figure 17*).

#### **IV. CLOSING COMMENTS**

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2185

**a. STATUS OF CLAIMS IN THE APPLICATION**

27. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. ' 707.07(i):

**a(1). CLAIMS REJECTED IN THE APPLICATION**

28. Per the instant office action, Claims 1-23 have received an action on the merits and are subject of a final action.

**b. DIRECTION OF FUTURE CORRESPONDENCES**

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Dillon whose telephone number is 571- 272-8010. The examiner can normally be reached on 9:30-6:00.


30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on 571-272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**IMPORTANT NOTE**

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
SAD

Sam Dillon  
Examiner  
Art Unit 2185

  
SANJIV SHAH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100